



## UNITED STATES DEPARTMENT OF COMMERCE

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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/298, 104 08/30/94 WASHINO

K FNI012

BURGESS, EXAMINER

26M1/0410  
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BIRMINGHAM, MICHIGAN 48009

ART UNIT PAPER NUMBER

2602

DATE MAILED: 04/10/95

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on \_\_\_\_\_  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

## Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474..    | <input type="checkbox"/> _____   |

## Part II SUMMARY OF ACTION

1.  Claims 1-21 are pending in the application.  
Of the above, claims 21 are withdrawn from consideration.
2.  Claims \_\_\_\_\_ have been cancelled.
3.  Claims \_\_\_\_\_ are allowed.
4.  Claims 1-20 are rejected.
5.  Claims \_\_\_\_\_ are objected to.
6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.
7.  This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8.  Formal drawings are required in response to this Office action.
9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).
11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).
12.  Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14.  Other

Exhibit 5, page 1

## EXAMINER'S ACTION

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**Part III DETAILED ACTION**

Claim Rejections - 35 USC § 112

1. Claims 1-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 1 is indefinite because, at line 5, it is not clear as to the element to which "a graphic processor" is connected to.

b) In claims 2 and 3, lines 2-3, the phrase "may be" is indefinite. Also, it is not clear whether the function "operative to convert ...photographic production", lines 2-3, is relating to "a standard/widescreen interface", claim 1, line 7; "a high definition television interface", claim 1, line 11; or the combined output of the "a standard/widescreen interface" and "a high definition interface".

c) In claims 8-11, lines 3, 2-3, 2-3, 2-3 and 2-3, respectively, the phrase "the first format" has no clear antecedent basis.

d) Claim 12 appears to be incomplete because it is not clear as to how "the chrominance bandwidth of an RGB video

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signal", lines 3-4, was provided. Further in claim 12, at line 7, "the R, G, and B signals".

e) In claim 13:

1. the phrase "if necessary, according to one of the following aspect ratios for review on the color display" is indefinite;

2. at line 10, the phrase "the production version" has no clear antecedent basis;

3. at line 22, the phrase "the R-R', G-G' and B-B' pairs" has no clear antecedent basis; and

4. lines 22-25, appear to be incomplete. It is noted that no ---mixers--- are previously recited so as to support the functional recitation "each mixer being operative to mix the signals ... chrominance bandwidth"

f) In claim 17, line 16, the phrase "which may have" is indefinite.

g) In claims 18, 19 and 20, lines 3 and 6; 3 and 5; and 3 and 5, respectively, should the phrase "a final format" reads --- said final format---, see claim 17, line 16, for support.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 2, 3, 4, 8-11 and 13-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hailey.

Hailey discloses a multi-format video production system adapted for use with a display device (Fig. 5), having:

- a) means (14) for receiving an input signal (from a film scanner means, satisfying claim 2) representative of an audio/video program in one of a plurality of formats;
- b) processor means (22, 16 and 18) connected to receive the input signal, and including: 1) a standard widescreen processor operative to convert the input format signal into an output signal representative of a standard/widescreen formatted image (note: the output of means (18) "525/625", standard format (NTSC/PAL)); and 2) a high-definition television processor means operative to convert the video program in the input format into an output signal representative of an HDTV formatted image (note: the output of means (18) "HDTV" formatted image); and
- c) controller means (20) for controlling the entire system so as to perform one or more of the conversions using the standard/widescreen and high-definition television processor means (Although not shown in the figures, operator interface

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means is inherently employed for causing the control means to either output "HDTV" or "525/625" formatted image, as shown at the output of means (18)), as claimed in claims 1, 2, 13, 14 and 17.

I. The limitation set-forth by claims 3 and 4 are inherently satisfied by the output signal from means (18), discussed above.

II. In regards to claim 8, the format of the input signal (film scan rate) is different from that of the output signal, therefore copying is inherently done so as to generate the converted format.

III. In regards to claims 9, 15 and 18, the rate of the input signal (film scan rate) is 24 frame per second and that of the conventional NTSC (525) signal is 30 frames per second.

IV. In regards to claims 10, 16 and 20, it should be noted that the scan rate of the 625 (PAL) is 25 frames per second.

V. In regards to claim 11, the scan rate of the input signal (film scan rate) is 24 frames per second and that of the output signal is converted to an HDTV compatible format (see figure, discussed above).

VI. In regards to claim 19, note interpolation means (16) for producing a final format which differs (having greater pixel dimensions) from the input format.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 5-7 are rejected under 35 U.S.C. § 103 as being unpatentable over Hailey in view of Sharman et al..

The system disclosed by Hailey is discussed above (paragraph 3). Although Hailey fails to disclose the details of the "Film scanner", such silent is an implication that any scanner, known to the practitioner, can be employed.

In an analogous art, Sharman et al. disclosed a conventional scanner for providing video signals for display (Fig. 1), having:

a plurality of charge coupled device image sensors (28)

(note: means (28 and 30) comprises three color sensors (red, green and blue));

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analog to digital converter means (50 and 52) connected to the output of each image sensor to generate a digital signal representative of the sensed image; and

a digital signal processor (54-62) connected to configured to receive the digital signals from each of the analog to digital converts and generate a digital video output signal in a predetermined format for processing.

Given the teaching of Sharman et al., a person having ordinary skill in the art would have readily recognized that the disclosed system of Hailey warrants the details of a system such as taught by Sharman et al., and would have been motivated to modify Hailey by employing a film scanner (having details), such as taught by Sharman et al., so as to obtain an input signal, to means (14), Hailey, wherein the luminance signal having a higher resolution than that composed from the color signals (enhanced resolution).

Thus, the combined system of Hailey and Sharman et al. satisfies the claimed limitation (claim 5).

In regards to claim 6, the system disclosed by Sharman et al. used two charge coupled sensors (28 and 30), one associated with the color signals (28) and the other (30) associated with the luminance signal (30), satisfying the claimed limitation.

In regards to claim 7, note both receiving means (14) and (64), Hailey and Sharman et al., respectively, include means for

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storing the digital image. Although both systems failed to mentioned that the image storage means is high capacity magnetic storage means, such a storage means is conventional used in the art, and would have been an obvious modification to the combined system of Hailey and Sharman et al. (discussed above). It would have been desirable to employ a removable storage means because such storage means would have prevented the erasure of necessary image data when the memory reached its full capacity.

#### RESTRICTION

6. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-20, drawn to a system for converting an image into multiple format, classified in Class 348, subclass 441.

Group II. Claim 21, drawn to a video production system for generating an image, classified in Class 358, subclass 527.

The inventions are distinct, each from the other because of the following reasons:

7. Inventions I and II are related as subcombinations disclosed as useable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately useable. In the instant case, invention II has a separate utility such as producing a high resolution video image. See

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(MPEP 806.05 (d)). disclosed as different combinations which are not connected in design, operation or effect. These combinations are independent if it can be shown that (1) they are not disclosed as capable of use together, (2) they have different modes of operation, (3) they have different functions, or (4) they have different effects. (MPEP 806.04, MPEP 808.01).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Posa, on 03/27/95, a provisional election was made without traverse to prosecute the invention of an image capturing system, claims 1-20. Affirmation of this election must be made by applicant in responding to this Office action. Claim 21 is withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

Allowable Subject Matter

8. Claim 12 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

Conclusion

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glen Burgess whose telephone number is (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

*GB* G. Burgess  
March 27, 1995

*J. Grody*  
James J. Grody  
Supervisory Patent Examiner  
Art Unit 262

FORM PTO-892 (REV. 2-92)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		SERIAL NO.	GROUP ART UNIT	ATTACHMENT TO PAPER NUMBER	4	
NOTICE OF REFERENCES CITED				086798,104 APPLICANT(S) <i>WASHING et al.</i>	2602			
U.S. PATENT DOCUMENTS								
#	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE		
A	5045932	7/3/91	<i>Sharman et al.</i>	318	507			
B	4633293	12/30/86	<i>Powers</i>	548	441			
C	5243433	7/7/93	<i>Harley</i>	348	445			
D								
E								
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FOREIGN PATENT DOCUMENTS								
#	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG	PP. SPEC.
L	514012	19.11.92	EP	<i>Mason</i>	102N	700		
M	314873	10.5.89	EP	<i>Rehak</i>	104A	5146		
N	015586	5.8.93	WO	<i>Coveridge</i>	102N	701		
O								
P								
Q								
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)								
R								
S								
T								
U								
EXAMINER	DATE							
<i>Allen Burgess</i>	3/28/95							
* A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).)								